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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/900,008	07/09/2001	Yoshiyuki Shino	35.C15536	4382

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NEW YORK, NY 10112

EXAMINER

DICUS, TAMRA

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/900,008

Applicant(s)

SHINO ET AL.

Examiner

Tamra L. Dicus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 14-16 and 18-36 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 14, 16, 18 and 20-36 is/are rejected.  
7) ☒ Claim(s) 15 and 19 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

The RCE and cancellation of claims 1-13 are acknowledged.

#### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 14, 18, 20-21, 23-26, 30-33, and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,447,979 to Hattori.

Hattori teaches an information recording medium comprising an electronic information storing circuit part (IC memory, col. 19, lines 61-63), a base material (paper or plastic or multilayered paper/film, col. 19, line 55-64, support 51, FIG. 30(a)) and an ink receiving layer comprising a water-soluble or hydrophilic synthetic resin (image receiving layer 52, FIG. 30 (a) comprising polyvinyl acetate based resins, col. 20, lines 40-65), in this order, and further comprising a barrier layer (col. 21, lines 34-35) for preventing ink components applied with or without an ink jet head to the ink receiving layer from reaching the electronic information storing circuit part (intended use, given little patentable weight) and having a concentration of ionic chlorine of 100 ppm or less (because Hattori does not include ionic chlorine and “or less” includes zero, therefore Hattori meets this limitation instant claim 14), wherein the barrier layer is provided between the electronic information storing circuit part and the base material

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(because the barrier layer is between base material, 51 and ink receiving layer, 52 and the IC is built into the base, 51, and Hattori explains prevention of ink fusion is desired (col. 21, lines 27-35), the ink prevention function is present). Instant claims 14, 18, 23, and 30 are anticipated. The ink is recorded by an ink jet at col. 20, line 14 (instant claim 20).

Regarding in claim 21 the recording medium is used as a non-contact tag (col. 1, lines 1-4).

To claims 24 and 31, the ink receiving layer contains inorganic fine particles (col. 21, line 19).

The thickness of the image receiving layer is between 1 and 50 microns, meeting Applicant's range of 1-100 microns (col. 20, lines 50-53) per instant claims 26 and 33.

To claims 25 and 32, Hattori teaches the ink receiving layer contains a cationic compound (col. 30, lines 10-68)-col. 31, line 25).

To instant claims 28 and 35, at col. 12, line 42, the medium is in the form of cut sheets.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16, 27, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,447,979 to Hattori, as applied to claims 23 and 30.

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Hattori essentially teaches the claimed invention as applied to claims 23 and 30 above.

Hattori does not teach the barrier layer having a thickness of 0.5 to 20 microns (instant claim 16), however, it would have been obvious to one of ordinary skill in the art to produce a thickness as claimed, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272. Thickness effects the strength and the ink penetration as suggested by Hattori (col. 21, lines 27-35).

Hattori does not teach the adhesive/release construction is on the surface other than that which the ink receiving layer is provided (instant claims 27 and 34).

Hattori teaches a transfer foil in this order: support/release/adhesive/release coated on a support in order to peel the transfer layer from the support and to form cards (col. 15, lines 55-68 and col. 19, lines 20-26).

Thus, it would have been obvious to have modified the support of Hattori to include the construction on the surface that does not have the ink receiving layer because Hattori teaches supports are coated with adhesive and release for transfer purposes to form cards (col. 15, lines 55-68 and col. 19, lines 20-26 of Hattori).

Claims 16 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,447,979 to Hattori, as applied to claims 23 and 30, and further in view of USPN 5,254,525 to Nakajima et al.

Hattori essentially teaches the claimed invention as applied to claims 23 and 30 above.

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Hattori teaches the barrier or cushion layer, but does not teach the barrier layer having a thickness of 0.5 to 20 microns (instant claim 16). Hattori does not teach the barrier layer comprises epoxy (instant claim 22).

Nakajima teaches a image recording medium and at col. 15, lines 10-30 teaches a cushion layer between the support and image receiving layer made of epoxy resin and is between 1 and 50 microns, meeting Applicant's claimed range from 0.5 to 20 microns of instant claim 16.

It would have been obvious to one of ordinary skill in the art to include a barrier layer between 0.5 and 20 microns because Nakajima teaches a barrier of the aforesaid thickness range is a conventional barrier thickness employing conventional epoxy resin as the barrier layer serving to prevent dye diffusion into the support (col. 15, lines 10-30 of Nakajima).

Claims 29 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,447,979 to Hattori, as applied to claims 23 and 30, and further in view of USPN 20010031342 A1 to Engle et al.

Hattori essentially teaches the claimed invention as applied to claims 23 and 30 above. Hattori does not teach the medium in form of a roll. Engle teaches an information recording medium in the form of a roll achieves useful lengths ([0038] of Engle). It would have been obvious to one of ordinary skill in the art to have modified the recording of Hattori to include a medium in the form of a roll because Engle teaches roll forms achieves useful lengths ([0038] of Engle).

***Allowable Subject Matter***

3. Claims 15 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Hattori does not teach or suggest a barrier layer having an air permeability value.

***Response to Arguments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

4. Nakajima is still used to teach the barrier composition of epoxy.

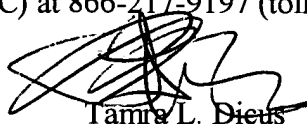
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is 571-272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tamra L. Dieus  
Examiner  
Art Unit 1774

3/25/05



RENA DYE  
SUPERVISORY PATENT EXAMINER

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4/4/05